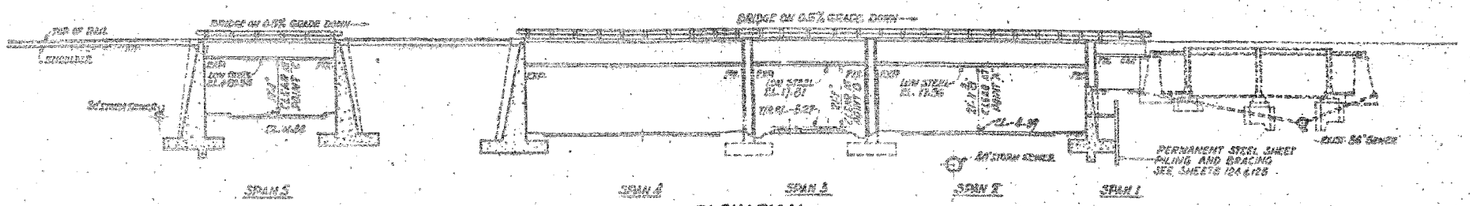
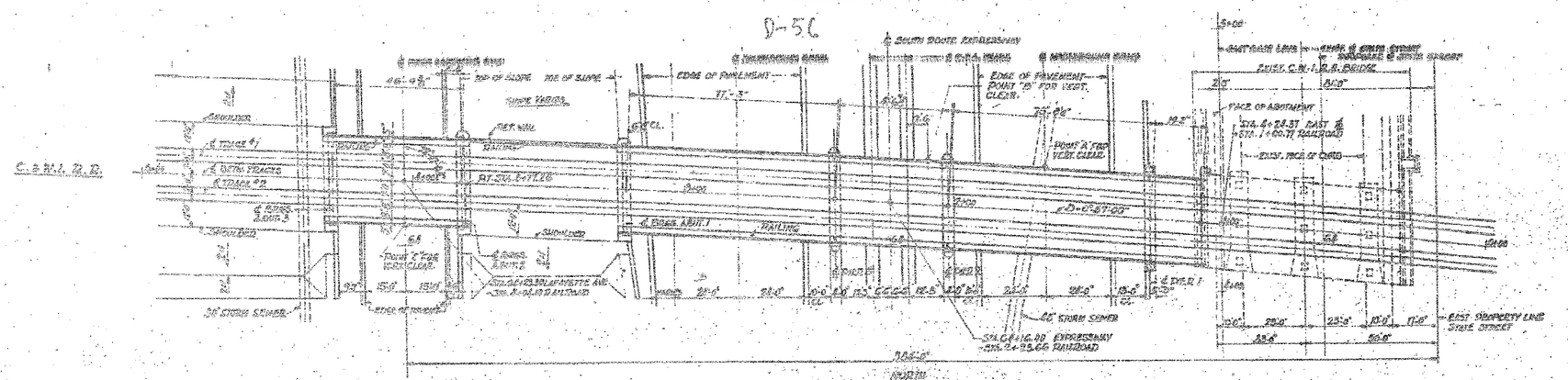
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
94	•	COOK	764	533
STA. 88+60 (SB I-57) TO STA. 1313+00 (SB RYAN) STA. 1126+91 (SB FORD)				
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
• (1516.1, 1717, & 1818) R-5				62593



ELEVATION
SCALE: 1"=20'

D-5C



PLAN
SCALE: 1"=20'

DESIGN DATA

LIVE LOAD

COOPER E72 PLUS DIESEL IMPACT

SPECIFICATIONS

DESIGN IN ACCORDANCE WITH A.R.E.A. SPECIFICATIONS FOR STEEL RAILWAY BRIDGES FOR FIXED SPANS NOT EXCEEDING 400 FT IN LENGTH, DATED 1969

ALLOWABLE STRESSES

f_s (TENSION) STRUCTURAL CARBON STEEL	18,000 LBS/in²
f_s (TENSION) REINFORCING BARS	20,000 LBS/in²
f_c (FLEXURE) CONCRETE	3,500 LBS/in²
f_c (FLEXURE) CONCRETE WITHOUT EARTH PRESSURE	1,400 LBS/in²
f_c (FLEXURE) CONCRETE WITH EARTH PRESSURE	600 LBS/in²
v (FOOTINGS) = 75 LBS/in²	n = 10

FOUNDATIONS

ABUTMENTS AND PIERS ON SPREAD FOOTINGS.
ALLOWABLE PRESSURE ON ABUTMENTS 1, 2 & 3 = 8,000 #/ft
ALLOWABLE PRESSURE ON PIERS 1, 2 & 3 = 8,000 #/ft

APPROVED BY C&WI R.R.

_____ CHIEF ENGINEER

DEPARTMENT OF HIGHWAYS
COOK COUNTY, ILLINOIS

PLAN AND ELEVATION
C. & W.I. R.R.
C.R.I. & P.R.R., C. & W.I. R.R. and BELT RY. STRUCTURES
SOUTH ROUTE EXPRESSWAY NORTH OF 31ST STREET

ALFRED BENESCH & ASSOCIATES — CONSULTING ENGINEERS — CHICAGO, ILLINOIS
100 S. WACKER DRIVE

PROJECT 296-20-3(313)IN
SCALE 1"=20'
APPROVED
C.H. 088
SHEET 5
STA. 1+00

DATE	BY	DESCRIPTION
		REVISIONS

SHEET 11 OF 12

REVISIONS NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
F.A.I. 94 (DAN RYAN EXPRESSWAY)
EXISTING GENERAL PLAN AND ELEVATION
NORFOLK SOUTHERN

S.N. 016-0144 — DESIGNED BY:
SCALE: N.T.S. — DRAWN BY: MAF, DJR
DATE: MARCH 1, 2006 — CHECKED BY: MI

TY·LIN INTERNATIONAL